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| EXAMINER |
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JARRETT, RYAN A

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| ART UNIT | PAPER NUMBER |
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2125

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
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| 3 MONTHS | 02/22/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/680,411

Applicant(s)

SANFORD ET AL.

Examiner

Ryan A. Jarrett

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20, 22-29, 38 and 40-46 is/are pending in the application.
- 4a) Of the above claim(s) 11-20 and 22-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 38 and 40-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-20, 22-29, 38, and 40-46 are pending in the application. Claims 11-20 and 22-29 are withdrawn from consideration. Claims 1-10, 38, and 40-46 are presented below for examination..

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/11/2007 has been entered.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-10, 38, and 40-46 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Independent claims 1 and 38 each recite, "a block configurator configured to...effectuate transfer of the application object file to the block processor". The original specification does not support this limitation, since the original specification discloses that it is the block manager 285 that performs this recited function, not the block configurator 245 (see page 12 lines 5-16, Fig. 2).

Independent claims 1 and 38 each recite, "a block configurator configured to...effectuate creation of the application objects from the application object files". The original specification does not support this limitation, since the original specification discloses that it is the block processor 260 that performs this recited function, not the block configurator 245 (see page 12 lines 5-16, Fig. 2).

Claims 2-10 and 40-46 depend from claims 1 and 38 and incorporate the same deficiencies.

Art Unit: 2125

Claim 46 recites, "a block manager for generating application object files from block types stored within a block database of the host workstation". The original specification does not support this limitation, since the original specification discloses that it is the block configurator 245 that performs this recited function, not the block manager 285 (see page 12 lines 5-16, Fig. 2).

Art Unit: 2125

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 38 and 40-46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 38 recites the limitation "the process control device" in line 4. There is insufficient antecedent basis for this limitation in the claim. It appears that the limitation should be changed to "the at least one process control device".

Claim 38 recites the limitation "the process field device" in lines 8-9. There is insufficient antecedent basis for this limitation in the claim. It appears that the limitation should be changed to "the process field devices".

Claim 38 recites the limitation "the process field device" in line 11. There is insufficient antecedent basis for this limitation in the claim. It appears that the limitation should be changed to "the process field devices".

Claim 38 recites the limitation "the process control device" in line 11. There is insufficient antecedent basis for this limitation in the claim. It appears that the limitation should be changed to "the at least one process control device".

Claim 38 recites the limitation "the process field device" in line 14. There is insufficient antecedent basis for this limitation in the claim. It appears that the limitation should be changed to "the process field devices".

Claim 38 recites the limitation "the process field device" in line 15. There is insufficient antecedent basis for this limitation in the claim. It appears that the limitation should be changed to "the process field devices".

Claim 38 recites the limitation "the application object file" in the third to last line. There is insufficient antecedent basis for this limitation in the claim. It appears that the limitation "application object" in the fourth to last line should be changed to "application object file".

Claim 43 recites the limitation "the process control device" in line 1. There is insufficient antecedent basis for this limitation in the claim. It appears that the limitation should be changed to "the at least one process control device".

Claims 40-46 depend from claim 38 and incorporate the same deficiencies.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 1-10, 38, and 40-46 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1 and 38 are generally directed to an abstract idea (§101 judicial exception). For claims including such excluded subject matter to be eligible, the claim must be for a practical application of the abstract idea. Diehr, 450 U.S. at 187, 209 USPQ at 8; Benson, 409 U.S. at 71, 175 USPQ at 676.

To satisfy section 101 requirements, the claim must be for a practical application of the §101 judicial exception, which can be identified in various ways: (1) The claimed invention “transforms” an article or physical object to a different state or thing, or (2) The claimed invention otherwise produces a useful, concrete and tangible result.

Practical Application by Physical Transformation

In the present case, claims 1-10, 38, and 40-46 not “transform” an article or physical object to a different state or thing.

Practical Application That Produces a Useful, Concrete, and Tangible Result

For eligibility analysis, physical transformation “is not an invariable requirement, but merely one example of how a mathematical algorithm [or law of nature] may bring about a useful application.” AT&T, 172 F.3d at 1358-59, 50 USPQ2d at 1452. In determining whether the claim is for a “practical application”, the focus is not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but

Art Unit: 2125

rather that the final result achieved by the claimed invention is "useful, tangible and concrete".

Claims 1 and 38 are directed to an "apparatus" and a "system" comprising a block configurator configured to "effectuate creation of the application objects from the application object files". This claimed subject matter lacks a practical application of a judicial exception (law of nature, abstract idea, naturally occurring article/phenomenon) since it fails to produce a useful, concrete and tangible result.

Specifically, the claimed subject matter of does not produce a tangible result because the claimed subject matter fails to produce a result that is limited to having real world value rather than a result that may be interpreted to be abstract in nature as, for example, a thought, a computation, or manipulated data. More specifically, the claimed subject matter of claims 1 and 38 provides for an "apparatus" and a "system" comprising a block configurator configured to "effectuate creation of the application objects from the application object files". This produced result remains in the abstract and, thus, fails to achieve the required status of having real world value. The act of "creating an application object from an application object file" can be considered a computation or data manipulation.

Where the final result is what has been determined, calculated, selected, decided, adjusted, created, etc. without using what has been determined, calculated, selected, decided, adjusted, created, etc. in a disclosed practical application or at least making what has been determined, calculated, selected, decided, adjusted, created,

Art Unit: 2125

etc. available for use through some form of conveyance (for example display, print, sound, transmission, etc.) or at least temporary storage somewhere, then a tangible result has not been achieved.

Although claims 1 and 38 are directed to an "apparatus" and "system", it is noted that machines, processes and, by logical extension, instructions carried by computer readable media or carrier signals that perform or would perform a method that constitutes solely an abstract concept do not manifest a "practical application" required for being a statutory claim.

Claims 2-10 and 40-46 are rejected by virtue of their dependency on claims 1 and 38. It is noted, however, that claim 46 produces a tangible final result of a block manager configured to "transfer the application object files to respective block processors of each local workstation".

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. As best understood, claims 1, 5-8, 38, and 43-46 are rejected under 35 U.S.C. 102(b) as being anticipated by Beaverstock et al. US 5,134,574.

For example, Beaverstock et al. discloses:

1. **An apparatus for monitoring performance of an industrial process comprising:**
 - a service portal (e.g., Fig. 1 #33) for collecting, transmitting and analyzing parameter data from a process field device, the service portal comprising:**
 - a network connection (e.g., Fig. 1 #31a-31b) configured to connect the service portal to the process field device (e.g., Fig. 1 #27, Fig. 1 #15) and a process control device (e.g., Fig. 1 #29a-29b) of the industrial process, the process control device being associated with the process field device;**
 - a remote collector (e.g., Fig. 1 #47a-47c, 49a-49c, 57a-57c, 59a-59c) configured to collect application objects from the process field device and a block processor of the process control device using control blocks, the application objects including real-time and archived parameter data from the process field device;**
 - a processor (e.g., Fig. 1 #53a-53d) configured to perform a real-time loop analysis of the industrial process using the collected application objects (e.g., col. 10 lines 46-54);**

a historian database (e.g., Fig. 1 #50) configured to store the collected application objects (e.g., col. 4 lines 21-31);

a communications module (e.g., Fig. 1 #25) configured to transmit the stored application objects to a remote monitoring station (e.g., col. 4 line 64 – col. 5 line 2);
and

a block configurator (e.g., Fig. 1 #55a-55d) configured to:

save block types to a block database,

generate an application object file from the saved block types,

effectuate transfer of the application object file to the block processor,

and

effectuate creation of the application objects from the application object files (e.g., col. 6 line 6 – col. 7 line 21).

38. A system for monitoring performance of an industrial process comprising:

at least one process control device (e.g., Fig. 1 #29a-29b, Fig. 1 #39a-39b) for monitoring and controlling process field devices, the process control device further comprising a block processor, application objects and data probes associated with the application objects (e.g., col. 5 lines 33-46);

a plurality of process field devices (e.g., Fig. 1 #27, Fig. 1 #15) operatively communicated with the at least one process control device; and

a service portal (e.g., Fig. 1 #41,43) for collecting, transmitting and analyzing parameter data from the process field devices, the service portal comprising:

a network connection (e.g., Fig. 1 #25) configured to connect the service portal to the process field devices and the at least one process control device of the industrial process;

a remote collector (e.g., Fig. 1 #47c, 49c, 57c, 59c) configured to collect application objects from the process field devices and the block processor using control blocks, the application objects including real-time and archived parameter data from the process field devices;

a processor (e.g., Fig. 1 #53c) configured to perform a real time loop analysis of the industrial process using the collected application objects (e.g., col. 10 lines 46-54);

a historian database (e.g., Fig. 1 #50) configured to store the collected application objects (e.g., col. 4 lines 21-31);

a communications module (e.g., Fig. 1 #25) configured to transmit the stored application objects to a remote monitoring station (e.g., col. 4 line 64 – col. 5 line 2);
and

a block configurator (e.g., Fig. 1 #55c-55d) configured to:

save block types to a block database,

generate an application object file from the saved block types,

effectuate transfer of the application object file to the block processor,

and

effectuate creation of the application objects from the application object files (e.g., col. 6 line 6 – col. 7 line 21).

Art Unit: 2125

43. The system of claim 38 wherein the process control device comprises a workstation (e.g., Fig. 1 #29a-29b, Fig. 1 #39a-39b).

44. The system of claim 38 wherein the processor performs at least one of the group consisting of simple analysis of the parameter data (e.g., col. 10 lines 46-54); trends analysis of the parameter data (e.g., col. 18 lines 15-29); statistical analysis of the parameter data (e.g., col. 15 lines 36-46); modeling of the parameter data; and a simulation development of the industrial process.

45. The system of claim 38 wherein the at least one process control device comprises a host workstation (e.g., Fig. 1 #39a-39b) and at least two local workstations (e.g., Fig. 1 #29a-29b) operatively connected to respective process field devices.

46. The system of claim 45, wherein the host workstation comprises a block manager (e.g., Fig. 1 #55c-55d) for generating application object files from block types stored within a block database of the host workstation, the block manager being configured to transfer the application object files to respective block processors of each local workstation (e.g., col. 6 line 6 – col. 7 line 21).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 2-4, 9, 10, and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beaverstock as applied to claims 1 and 38 above, and further in view of Official Notice. Examiner takes Official Notice that such modifications are notoriously well known in analogous arts for, and it would have been obvious to employ such modifications due to well-known and well-established benefits.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Martin et al. US 2003/0144932 discloses a system and method for real-time activity based accounting.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan A. Jarrett whose telephone number is (571) 272-3742. The examiner can normally be reached on 10:00-6:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2125

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ryan A. Jarrett
Examiner
Art Unit 2125



2/14/07